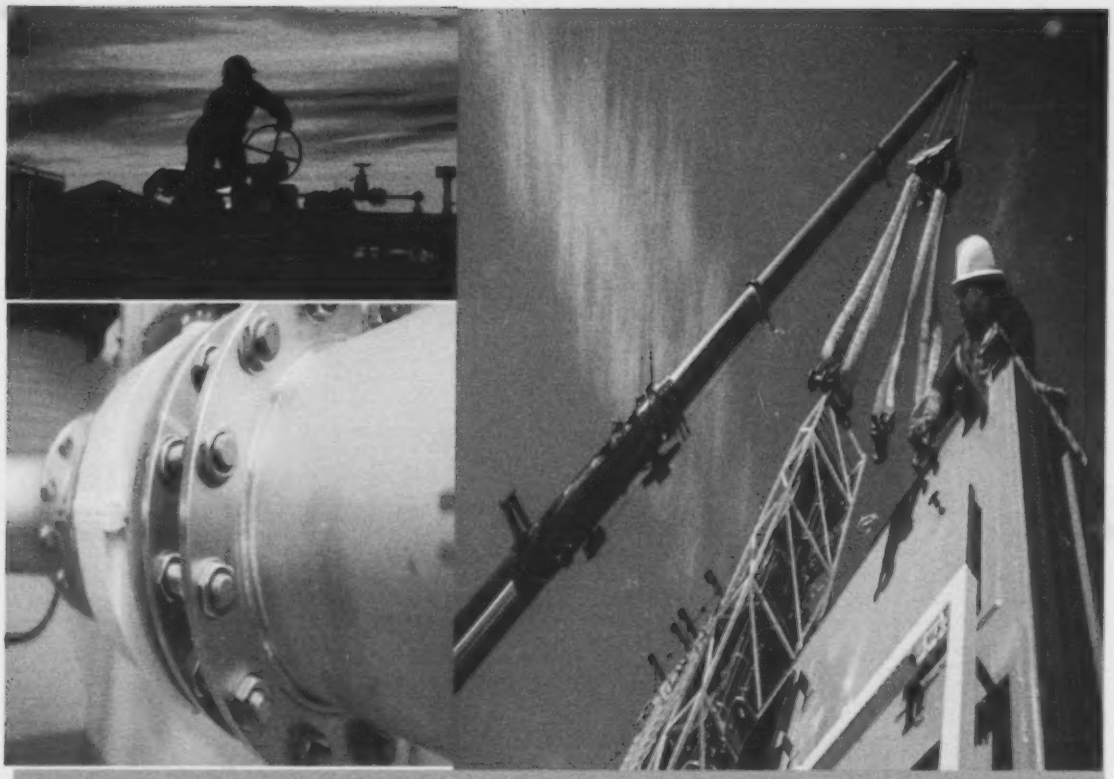

INDUSTRY PROFILES

Mining and Oil and Gas Extraction Industry

2015

Alberta

Overview:

The Mining and Oil and Gas Extraction industry[1] in Alberta includes companies involved in activities engaged in extracting naturally occurring minerals, such as:

- exploring for crude petroleum and natural gas;
- drilling, completing and equipping wells;
- operating separators, emulsion breakers, desilting equipment and field gathering lines for crude petroleum;
- mining for coal, metal ore, liquids, and non-metallic mineral mining and quarrying; and
- other activities in the preparation of oil and gas up to the point of shipment from the producing property.

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[1] North American Industry Classification System (NAICS) 2007 211, 212, 213

Section A: Business Environment

1. 2014 Employment and Unemployment Numbers and Rates

Table 1

	Alberta	Mining and Oil and Gas Extraction Industry
Number of employed	2,274,600	175,300
Employment Share	N/A	7.7%
Number of unemployed	111,700	6,600
Unemployment rate	4.7%	3.6%

Note: N/A denotes not-applicable. Employment share is obtained by dividing the number of employment in this industry by total employment in Alberta.

For more information on employment numbers or for a historical comparison, please go to the Labour Force Statistics[2] or Statistics Canada[3] websites.

2. Industry's Growth

- The Mining and Oil and Gas Extraction industry accounted for 7.7% of total employment in Alberta in 2014.
- Employment in is this industry expected to grow at an average rate of -0.4% from 2015 to 2019[4].
- The industry is expected to account for 7.2% of total employment in Alberta in 2015.

For more information, see the Alberta Learning Information Service (ALIS)[5] website for descriptions of industries.

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[2] See http://work.alberta.ca/labour/labour-force-statistics-and-annual-reviews.html
[3] See http://www.statcan.gc.ca
[4] Alberta Modified Canadian Occupational Projection System (COPS) Outlook 2015 – 2019, Industry Employment Outlook
[5] See http://www.alis.alberta.ca

3. Facts, Trends and Outlook

According to Statistics Canada's National Economic Accounts, the Agricultural industry accounted for approximately 27.4% of Alberta's Gross Domestic Product in 2014, down from 30.9% in 2004. Its contribution to Alberta's total employment increased from 6.0% in 2004 to 7.7% in 2014.

Total employment (the total number of employees and self-employed people, 15 years and over) in 2014 was 2.8% higher than its level in 2013. Over the last 10 years, employment increased by 68,900 from 2004, a 64.8% increase. There were 175,300 employed in the industry in 2014, of whom 96.7% were full time and 3.3% were part time.

Table 2

Characteristic	Alberta	Forestry, Fishing, Mining and Oil and Gas Extraction*
Median Retirement Age (years)	62.4	62.3
Average Number of Hours Worked per Week	37.5	45.7
Multiple Jobholders (% of total employment)	5.7%	2.7%
Average Job Tenure (months)	88.2	232.3
Employees Under Union Coverage (%)	83.1%	91.5%
Employees Working Overtime per Week (%)	19.4%	29.8%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Tables 282-0022, 282-0031, 282-0042, 282-0078 and 282-0084, 2015, and custom tabulation (median retirement age) in 2014

* Mining and Oil and Gas Extraction is grouped with Forestry, Fishing and Logging with Support Activities for sample size.

Note: The percentage of multiple jobholders in Alberta is obtained by dividing the number of multiple jobholders in Alberta by total employment in Alberta. The percentage of multiple jobholders in the industry is obtained by dividing the number of multiple jobholders in the industry by total employment in the industry. This calculation method also applies to the percentage of employees under union coverage and the percentage of employees working overtime per week.

According to *Alberta Occupational Demand Outlook 2013-2023*[6], employment growth in the following occupations: Supervisors, mining, oil and gas; Underground miners, oil and gas drillers and related workers; Mine service workers and operators in oil and gas drilling; and Primary production labourers, is expected to exceed Alberta's average rate for all occupations of 2.3%.

[6] See http://work.alberta.ca/labour/labour-market-forecasts.html

4. Size of Businesses in Alberta and the Industry

Table 3

Establishment Size	Businesses in Alberta		Businesses in Forestry, Fishing, Mining and Oil and Gas Extraction*	
	Number of Employees	%**	Number of Employees	%**
Less than 20 employees	696,900	36.9%	34,800	21.3%
20 to 99 employees	674,500	35.7%	51,600	31.6%
100 to 500 employees	334,100	17.7%	37,500	23.0%
Over 500 employees	185,200	9.8%	39,300	24.1%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0076, 2015
*Numbers and percentages refer to Fishing, Mining and Oil and Gas Extraction, and Forestry and Logging with Support Activities. These are grouped together for establishment size.
** Percentages may not add up to 100 due to rounding.
Note: Statistics Canada's survey methodology for determining establishment size differs from the one it uses in the Labour Force Survey to determine total employment. As a result, the total number of employees by establishment size will not be the same as total employment in the combined industry.

Section B: Human Resources Profile

1. Occupational Information

Some examples of occupations in the Mining and Oil and Gas Extraction industry include:

- mining engineer;
- blaster;
- drilling and service rig manager;
- petroleum engineer; and
- drilling rig leasehand/floorhand.

For a complete listing of all occupations related to this industry as well as detailed information on education and skill requirements, visit the Alberta Occupational Profiles[7] website.

2. Demographics: Gender and Age

According to the Labour Force Survey, the gender breakdown in the Mining and Oil and Gas Extraction industry in 2014 was as follows:

- women employed: 43,800 people, or 25.0%
- men employed: 131,500 people, or 75.0%

Overall in Alberta, women accounted for 44.8 % and men made up 55.2% of total employment (for all industries).

Table 4

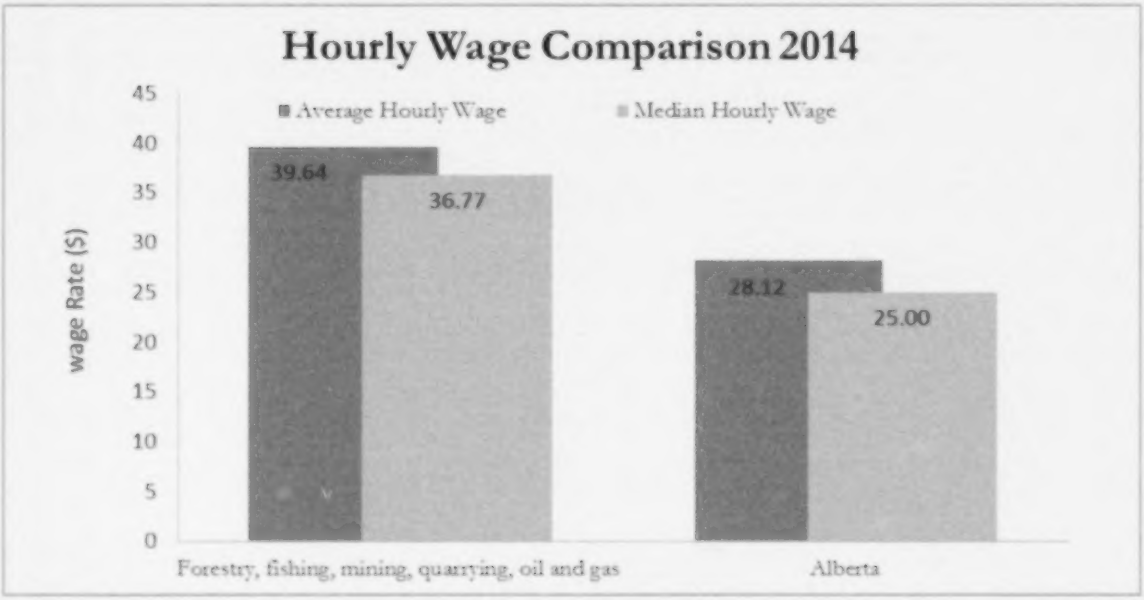
Age Characteristics	Employment in Alberta		Employment in Mining and Oil and Gas Extraction	
	Number	%	Number	%*
15-24 years	354,100	14.8%	18,400	10.1%
25-54 years	1,605,000	67.3%	141,600	77.8%
55 years and over	427,200	17.9%	21,800	12.0%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0008, 2015
* Percentages may not add up to 100 due to rounding

[7] See http://www.alis.alberta.ca/occinfo

3. Wages and Salaries

Chart 1



Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0072, 2015
Note: Wages pertain to Mining and Oil and Gas Extraction, Fishing, and Forestry and Logging with Support Activities, which are grouped together for sample size reasons.
The average hourly wage is obtained by dividing the sum of the wages of all the employees by the total number of employees. The median hourly wage is that wage below which half the employees earn and above which half the employees earn.

Table 5

Occupation	Average Hourly Wage			Average Annual Salary
	Starting	Overall	Top	
Petroleum engineer	$ 43.71	$ 57.48	$ 72.59	$117,880
Petroleum, gas and chemical process operator	$ 37.85	$ 42.52	$ 46.32	$ 88,755
Truck driver (oil and gas extraction)	$ 25.63	$ 30.17	$ 35.59	$ 74,330

Data Source: 2013Alberta Wage and Salary Survey

For more information on the *2013 Alberta Wage and Salary Survey*, refer to the WAGEinfo[8] webpage. For job descriptions, duties, required skills and education for specific occupations in the Mining and Oil and Gas Extraction industry, visit the ALIS[9] website.

[8] See http://www.alis.alberta.ca/wageinfo
[9] See http://www.alis.alberta.ca

Section C: Additional Information

Links to Industry Associations

- Canadian Association of Oilwell Drilling Contractors (http://www.caodc.ca)
- Canadian Association of Petroleum Producers (http://www.capp.ca)
- Canadian Institute of Mining, Metallurgy and Petroleum (http://www.cim.org)
- Coal Association of Canada (http://www.coal.ca)
- Petroleum Human Resources Council of Canada (http://www.petrohrsc.ca)
- Petroleum Services Association of Canada (http://www.psac.ca)
- Petroleum Technology Alliance Canada (http://www.ptac.org)

Call us or visit our website for more information or to find the following publications:

- 2014 Annual Alberta Labour Market Review
- Monthly Alberta Labour Force Statistics Highlights and Packages
- Alberta's Occupational Demand and Supply Outlook
- Alberta Labour Force Profiles
- Alberta Industry Profiles

www.work.alberta.ca/labour.html (see Labour Market Information)
In Edmonton: 780.422.4266
Long distance: 1.800.661.3753

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